

MAYOR & COUNCIL COMMUNICATION

April 18, 2006

Subject: Sustainable Energy Standard – Adopting An Updated

Page: 1 of 2 **Green Building Policy for City Building Construction**

Projects (City-Wide)

Issue – Consider the adoption of a policy (resolution attached) that states that all new City buildings and major building renovations over 5,000 sq. ft. in size be designed and constructed to meet the requirements of the Sustainable Energy Standard by meeting the certification requirements of the Leadership in Energy and Environmental Design (LEEDTM) Program at the Silver Certification Level and to achieve higher levels for certification (Gold or Platinum) whenever project resources and conditions permit. Should the project team determine through analysis that such certification is not in the best interest of the City (excessive cost, unsuitability, etc.) the team will refer their findings in writing to the City's Energy Manager and the Director of General Services for evaluation and recommendation to the City Manager.

Recommendation – It is recommended that the Mayor and Council adopt the attached Resolution.

Background – Since the early 1990's, the City of Tucson has promoted sustainable design. sometimes called "Green Building," in a variety of ways. These include initiatives such as Life-Cycle costing and building to the Sustainable Energy Standard. In April 1999, Mayor and Council directed staff to continue to pursue comprehensive and coordinated approaches to sustainable design and construction of public facilities. The City has constructed a number of new facilities that incorporate elements of sustainability, including: solar energy utilization, energy management and control systems, and reflective white roofs. These include the Adaptive Recreation Center, El Rio Adult Education Center, and Midtown MultiService Center – all Governor's Energy Award winners.

The SES standard adopted in 1998 for the community of Civano was recently updated. The latest version of the SES allows for compliance through one of two paths. One path requires the building to use 50% less energy than the ANSI/ASHRAE Energy Efficiency Standard 90.1 -2001 version without amendments. The other path allows for compliance if the building is registered to be LEEDTM Silver.

Discussion - The Mayor and Council per resolution 18082 of July 6, 1998 applied the SES to new City buildings and additions/modifications. The resolution was specific to the 1998 version of the SES. The SES was updated in July 2005. City staff has researched the updated SES and suggests that City buildings should be designed and constructed to the SES by meeting the requirements for the LEEDTM Silver Certification. LEEDTM certification ensures compliance with the rating system criteria.

<u>Legal Considerations</u> – The attached resolution was prepared by the City Attorney's office.

APRIL18-06-188

MAYOR AND COUNCIL COMMUNICATION

"Sustainable Energy Standard..."

<u>Financial Considerations</u> – Studies indicate that with initial integrated design, sustainable buildings have an average 0-2% (or less than \$3 - \$5/sq.ft, 2% of \$150 to 250/sq.ft. construction cost), increase in design/construction costs over their conventional counterparts, with overall, long-term financial benefits due to reduced operating, maintenance and other costs, exceed the additional design/construction costs by a factor of 10 to 1.

Data from existing LEEDTM certified projects indicates that there is an almost immediate payback on any additional design/construction costs. A LEEDTM certified building should payback any additional design/construction cost in 1-5 years, and then continue to return many years of savings over the useful life of the building. In some cases there are reduced construction costs due to integrated design practices as required for LEEDTM certification. For example peak building cooling loads are reduced if energy efficient lighting and white reflective roofing are installed, often saving construction costs for air conditioning equipment.

Respectfully submitted,

Like Letcher

Page: 2 of 2

Mike/Letcher

Depaty City Manager

ML:RONLEWIS:vh:kp General Services Department APRIL18-06-188

Attachments: Resolution

ADOPTED BY THE MAYOR AND COUNCIL

RESOLUTION NO. 20322

RELATING TO SUSTAINABLE ENERGY STANDARDS: AUTHORIZING AND APPROVING APPLICATION OF THE SUSTAINABLE ENERGY STANDARDS TO CERTAIN CITY BUILDINGS, ADDITIONS, MODIFICATIONS AND RENOVATIONS AND REQUIRING COMPLIANCE WITH THE REQUIREMENTS OF THE LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN PROGRAM AT THE SILVER CERTIFICATION LEVEL OR HIGHER; AND DECLARING AN EMERGENCY.

BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF TUCSON, ARIZONA, AS FOLLOWS:

SECTION 1. It shall be the Policy of the City of Tucson that the Sustainable Energy Standard (SES) shall be used for new City buildings and major building additions, modifications, or renovation projects in excess of 5,000 square feet by complying with the certification requirements of the Leadership in Energy and Environmental Design (LEED) program at the Silver Certification level.

SECTION 2. Notwithstanding the provisions of Section 1, and only where project resources and conditions permit, it shall be the policy of the City of Tucson that new City buildings and major building additions, modifications, or renovation projects in excess of 5,000 square feet shall meet the certification requirements of LEED at the gold or platinum certification level.

SECTION 3. The City Manager is authorized to waive the requirements of Section 1 and Section 2 based upon a finding of factors including, but not limited to, excess cost or unsuitability to the project. If a specific project team determines through appropriate alternative analysis (such as life-cycle cost analysis, technical feasibility, or other) that SES compliance or LEED Silver Certification is not in the City's best interest, the project team

shall make written findings and shall refer them to the City Energy Manager and Director of General Services for evaluation and recommendation to the City Manager. After consideration of the written findings, the City Manager shall determine if a waiver is appropriate.

SECTION 4. City projects for the construction of new City buildings, major building additions, modifications or renovation projects in excess of 5,000 square feet with established, firm, fixed budgets on the effective date of this resolution are exempt from the requirements of Sections 1 and 2 of this resolution.

SECTION 5. The various City officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this resolution.

SECTION 6. WHEREAS, it is necessary for the preservation of the peace, health and safety of the City of Tucson that this resolution become immediately effective, an emergency is hereby declared to exist and this resolution shall be effective immediately upon its passage and adoption.

PASSED, ADOPTED AND APPROVED BY THE MAYOR AND COUNCIL OF THE

CITY OF TUCSON, ARIZONA, _______.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM: REVIEWED BY:

CITY ATTORNEY CITY MANAGER

04/07/2006 2:32 PM